

DOCUMENT RESUME

ED 229 331

SP 021 445

TITLE Introduction to CAITE V. Module 130. Computer Aided Instruction in Teacher Education. Revised.

INSTITUTION Iowa Univ., Iowa City. Center for Educational Experimentation, Development, and Evaluation.

SPONS AGENCY Department of Education, Washington, DC.

PUB DATE 82

GRANT G007801842

NOTE 27p.

AVAILABLE FROM CEEDE, The University of Iowa, 218 Lindquist, Iowa City, Iowa 52242 (\$45.00 for module, which includes Apple two sided disc and booklet).

PUB TYPE Guides - Classroom Use - Materials (For Learner) (051)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS *Computer Assisted Instruction; Educational Diagnosis; Higher Education; Independent Study; *Individual Instruction; Individualized Education Programs; *Mainstreaming; *Programed Instructional Materials; Special Education; *Teacher Education

ABSTRACT

Computer Aided Instruction for Teacher Education (CAITE) is a system of individualized self-instructional materials designed to teach educators basic information, attitudes, and skills related to mainstreaming. This booklet is to be used with the first of 16 modules in the set. The module provides instruction on: (1) the target audience for the CAITE program; (2) current federal legislation for educating handicapped children; (3) definitions for "handicapped children" and "special education"; (4) reasons for early identification of children requiring special educational programs; (5) labeling of exceptional children; (6) cautions to be considered when labeling children; (7) differences between a "disability" and a "handicap"; and (8) use of the term "behavior" throughout the CAITE modules. Subsequent modules in the set deal with: testing, information gathering, individual differences, specific disabilities, and the intentions and implementation of goals identified in Public Law 94-142. (JD)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

CAITE

COMPUTER AIDED INSTRUCTION IN TEACHER EDUCATION

INTRODUCTION TO CAITE I*

MODULE 130.

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

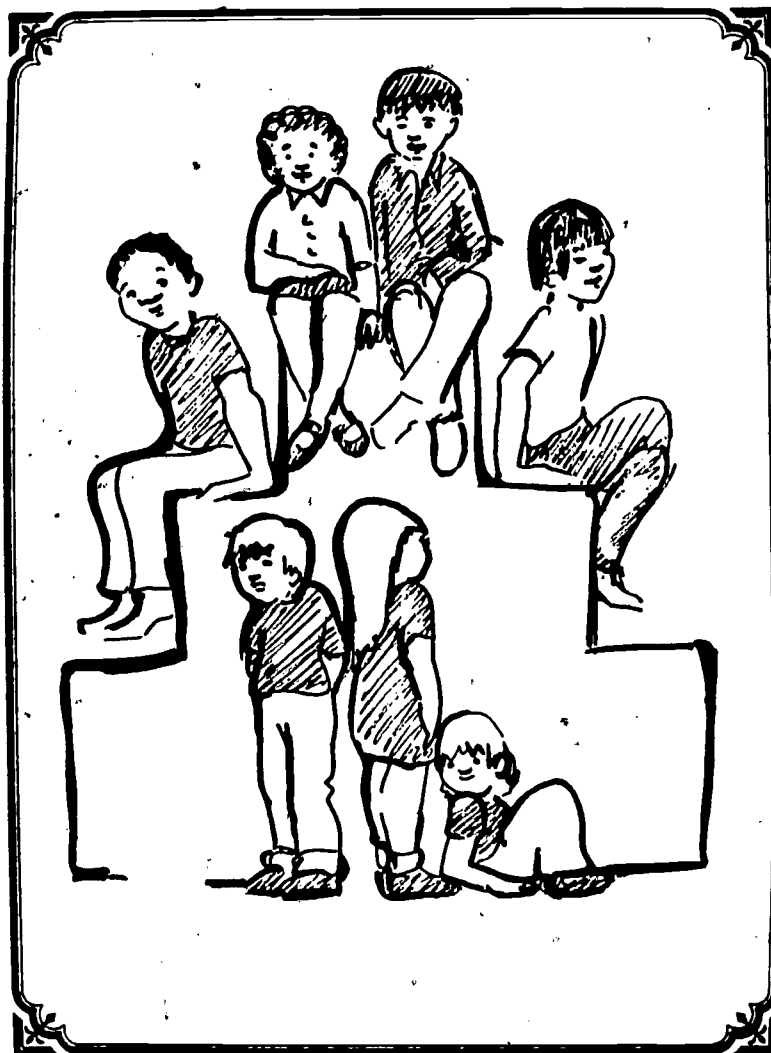
"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Lawrence M. Stolorow

"This booklet is to be used
with Computer Aided
Instruction (CAI) materials.

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

*This is the 1982 Revision of CAITE--Computer Aided Instruc-
tion for Teacher Education. It consists of 16 modules, all of
which are a part of A.S.P.D.--A System of Personnel Development,
a CEEDE Program within the College of Education, The University
of Iowa.



Copyright, 1982, Center for Educational Experimentation, Development and Evaluation, The University of Iowa, Iowa City, IA 52242.

These materials were developed at CEEDE and only partially funded under a grant, BEH/DPP number G007801842. The contents of this publication do not necessarily reflect the views or policies of the Department of Health, Education and Welfare, nor does mention of trade names, commercial products or organizations imply endorsement by the U.S. Government, or the University of Iowa, 1982. For an earlier, related but different effort, see Cartwright and Cartwright, 1972.

INTRODUCTION TO CAITE¹

What is CAITE?

CAITE is a system of individualized self-instructional materials that are designed to serve the needs of educators to learn some basic information, attitudes and skills that relate to the mainstreaming of handicapped children in educational programs. The CAITE materials include computer-based interactive instructional programs, printed booklets and a management system that is designed to foster learning and retention of the materials as well as efficient and effective use of the learner's time.

The CAITE materials have been designed for use in teacher education, but they also have been used with aides and parents who, because of increased awareness of the needs and educational resources for serving the handicapped and because of Federal and state legislation, are becoming more and more involved in the educational process relating to handicapped children. These materials serve as a basic introduction to special education for the handicapped. They are individualized in that they can be used by a person to learn by him or herself. They are self-instructional at more than one level in that the design of the materials provides feedback to each learner which can be used in making decisions about the use of the time available for learning. Both in terms of pacing and in terms of the use of the available time, the learner can make informed decisions relative to his/her own competence and interest. Since the design of the materials allows the learner to set his/her own priorities and to go as slowly or as fast as he/she wants, the locus of control of the learning process is in the learner. However, it should be recognized that it is possible for the learner to relinquish

¹CAITE is an acronym for Computer Aided Instruction for Teacher Education.

OBJECTIVES

After completing this module, "Introduction to CAITE," you should be able to:

- 1.) state the target audience intended for the CAITE program.
- 2.) name the current federal legislation for educating handicapped children.
- 3.) state according to Public Law 94-142, the definitions for "handicapped children" and "special education."
- 4.) summarize the reasons for early identification of children requiring special educational programs.
- 5.) explain why labeling exceptional children is necessary.
- 6.) explain the cautions which should be considered when labeling children.
- 7.) describe the differences between a "disability" and a "handicap."
- 8.) define the term "behavior" as it will be used throughout the CAITE modules.

this control and give it to a teacher. The design used allows for this mode of use as well. The accountability that is built into the CAITE materials allows for the judgmental process of objective evaluation to take place. Data are collected on learner performance and can be used for awarding credits or CEU's, for example, in an institutionalized setting. On the other hand, the learner can use the objective data relating to his/her performance to make personal assessments, if that is what is wanted.

In order to take maximum advantage of the opportunity to provide flexibility to the learner and also to an instructor interested in relating these materials to some purpose or established course he/she has in mind, a modular construction of the CAITE materials was used. Units that are self-sufficient as learning experiences have been designed and developed and these are called modules. CAITE modules have a common design. The general design concept is that the materials are individualized and provide for self-instruction. Information is organized around a set of explicit objectives and the presentation or delivery involves both the reading of books and interactive use of a computer. A systems design involving feedback is used as the critical generic feature of the design of the learning environment.

Every module has: 1) a set of objectives it is designed to achieve; 2) a pretest to determine the learner's competence at entry; 3) a dual set of instructional materials--a book and a computer-based interactive program of instruction; 4) a mastery test given at the completion of the instruction; and 5) a management system that records the learner's responses, scores performance, stores data and provides reports to the learner and his/her instructor. The data collected are at the very specific level of the individual response to questions as made by each learner, the test scores and the collective performance on the CAI materials as well as the sequence and frequencies of use of the modules and their components, the pretest, the learning materials and the mastery test. Since the learner can

choose the modules in a sequence that relates to his/her preferences and can override the recommendations of the system with respect to studying or not studying the materials provided and can repeat the mastery test, the system can be said to provide the learner with a freedom of choice that is analogous to a free economy. Basically, the learner is making decisions about how to spend his/her time. This can be done whether or not the learner has control of the reasons for engaging in the CAITE experience or whether engagement is externally determined by such factors as a course assignment, recertification, or simply conforming to the rules or guidelines of an employer.

While the booklets can be used independently just as the chapters in a textbook might be, the full impact of the CAITE materials can only be achieved if the computer-aided instruction (CAI) also is used. The interactive CAI not only is designed to provide for practicing some things read in the booklets, it also supplements the booklet with additional materials and it provides opportunities to apply information and concepts taught in the booklet. The CAI materials have been described by a majority of learners as providing an added dimension of interest.

Furthermore, when the CAI is used the materials really become a system of instruction with feedback to the learner. They become self-instructional. Not only is the pretest given on the computer, but it is also scored by the computer and the student receives immediate knowledge of results. The learner knows his/her score immediately upon completion of every test. A criterion is built into the management system so that, for example, if the learner achieves an 80% he/she would be told that he/she passed and could in the case of a pretest, skip that material. If time permitted, the learner could go through either the book or the CAI materials as he/she preferred. If the learner earned a score less than 80%, the system would tell him/her that and what the actual score was. In addition, it tells the learner that it is advisable to study the instructional materials before taking the mastery test.

After the learner completes the CAI materials and has read the booklet, a mastery test is given that covers the objectives of the module. The learner's score on the mastery test is compared with his/her score on the pretest and a gain score is calculated by the computer. This is a particular gain score, called the percent-of-maximum-possible-gain score, or pmp gain score. It is calculated by taking into account the learner's pretest score, subtracting it from the maximum possible score to determine the maximum possible gain. Then the actual gain made by the learner is related to the mpg (maximum possible gain) to get a percentage. Naturally, if the learner received a 100% score on the mastery test he/she would have received a 100 as the pmp gain score. If the gain was less than the pmp gain will be less than 100. For example, if the learner had a 25% on the pretest, then the mpg would be 75%. If the learner actually made a 50% score on the mastery test, then the pmp gain score would be $25/75$ or 33%. In other words, by gaining 25% over the pretest score the learner only gained a third of what was possible for him/her to gain. The management system provides the learner with his/her pmp gain score after the completion of the mastery test for each module.

CAITE consists of a set of modules. The actual number of modules for CAITE I is 16. Subsequent editions could have a different number of modules since the experience gained from its use will determine the changes made. The sixteen modules are listed below.

Module Number and Title

130 - Introduction to CAITE I
 131 - Educational Information Processing Model
 133 - The Decision Process
 134 - Gathering Information About Children
 135 - Reliability, Validity, and Usability
 136 - Individual Differences and Normality
 137 - Profiles of Individual Differences
 139 - Mental Disability

Module Number and Title

141 - Emotional Disabilities
 143 - Visual Problems and Visual Screening
 144 - Hearing Impairment
 145 - Speech Problems
 147 - Motor, Physical, and Health Problems
 149 - Learning Disability
 289 - Public Law 94-142
 343 - Instructional Design Simulation

PURPOSES OF CAITE

The general purpose of CAITE is to give educational personnel the knowledge and skills necessary to deal effectively with handicapped children in a regular school setting.

At one time it was common practice to place people who had intellectual, emotional, or physical handicaps in institutions, based on the premise that there they could be efficiently educated and protected from the "outside world." Also, "normal" people could thus avoid having to deal with people who were "different."

The current philosophy regarding the handicapped is that they are just like "normal" people in all respects except for their handicap, and therefore, they should have as much freedom and as many options in living as that handicap permits. De-institutionalization of the handicapped is encouraged whenever feasible. This means that the public schools have to meet the needs of the handicapped and provide them with an appropriate education. P.L. 94-142, the "Education of All Handicapped Children Act," was passed in 1975 by Congress to insure equal educational opportunities for all disabled people.

As a course of study, CAITE is a series of modules which is taken as a set. These modules are appropriate for teachers of all grade levels--preschool, elementary, and secondary--and for persons interested in both regular and special education. The list of the modules in CAITE gives you an idea of the coverage or scope of the course.

As a course of study CAITE is designed to be of interest and use to principals, administrators and supervisors; special class

7

supervisors, school nurses, psychologists, aides, music, art, shop and physical education specialists, special services personnel, and other school related personnel, including day care workers and aides.

CAITE includes information that can help school-related personnel carry out two vital responsibilities associated with mainstreaming of the handicapped as prescribed by P.L. 94-142 and related legislation.

1. Information to help identify young children with problems that might interfere with the educational process. Each state is required by P.L. 94-142 to develop a method for locating and evaluating children between the ages of 3 and 21 who may need special education services. This process is called "child find."
2. Information to provide knowledge and skills needed for appropriate early intervention aimed at either the remediation of the children's problems or the prevention of the occurrence of problems. P.L. 94-142 stipulates that the exceptional student should be educated in the least restrictive environment; i.e., in a setting which is as close as possible to the normal, everyday environment for non-exceptional children. Regular classroom teachers will be having handicapped students in their classes more frequently, and they need help in implementing programs for these students.

Early Identification

If handicapped children can be identified while they are still young, it may be possible to prevent the occurrence of a more serious handicap later on. Handicapping conditions are usually cumulative; that is, if an educational problem goes unidentified, the child is likely to fall further and further behind his/her peers in school. Eventually, the lack of progress will be obvious, but by then it may be too late for the child to catch up. Teachers and other school personnel are in a unique position to help identify problems of children and to

prevent the cumulative educational deficit which usually occurs hand-in-hand with undetected problems.

The number of undetected handicaps is probably larger than one might imagine. For example, the State of Iowa has a population of approximately 38,000 school age children who are currently involved in special education instructional programs. This represents over 6% of the total public school enrollment. The percentage is expected to reach and level off at 9%-12% in 1982. It is estimated that as many as 2,000 handicapped children are not currently receiving special education services. These are mainly preschoolers and severely handicapped children.

One way educational personnel can help the situation is to find the children who need help now, or who will need help later, while the children are still young. It is entirely possible to ward off some serious educational problems if the problems are caught before they get out of hand. The CAITE program will help educational personnel identify children who are handicapped or who are likely to develop problems later.

The second way that educational personnel can help alleviate the problems of handicapped children in the United States is to provide help at the classroom level to children who need special considerations. The CAITE program will provide useful information to help individualize classroom instruction in order to comply with P.L. 94-142 and increase the learning of all the children in the class. P.L. 94-142 requires the development of an Individualized Educational Program (IEP) for each handicapped child. The IEP must be a written document that specifies long and short term educational objectives, indicates services that will be provided to the special student, and contains procedures for evaluating the program. The CAITE program helps classroom teachers understand the importance of one of the techniques used in preparing IEP's.

The CAITE Point of View

The word "behavior" is used over and over again in the CAITE materials. The word "behavior" as used in CAITE means an activity, or an observable act or performance of a child. The term "behavior" does not mean deportment or conduct in this context. Throughout the CAITE program, the importance of dealing with children's observable behaviors will be stressed.

The philosophy of this program states that the most fruitful approach to improving a child's education is to work on the remediation of the problems indicated by the child's behavior, or to help the child adapt to problems caused by his/her disability. The etiology, or cause, of the problems should be of only secondary importance.

Many references will be made to the importance of working with children on an individual basis. One emphasis in materials is upon the detailed analysis of the individual differences among children. Persons who complete the CAITE program should be able to identify similarities and differences among children in such areas as vision, hearing, and motor skills, as well as their specific strengths and weaknesses in the academic areas. In connection with this last point, the CAITE materials will be helpful in providing a systematic means of monitoring the progress of children, a step toward the Annual Review Process mandated by P.L. 94-142. This law requires that each IEP be reviewed every year prior to the beginning of the child's next school year.

An Educationally Oriented Definition of Handicapped Children

Handicapped children are those children who deviate so far from the average that they cannot profit satisfactorily from regular school programs and thus require special provisions in order to achieve their educational potential.

HANDICAPPED CHILDREN ARE DEFINED BY P.L. 94-142 AS:

MENTALLY RETARDED, HARD OF HEARING, DEAF, SPEECH IMPAIRED, VISUALLY HANDICAPPED, SERIOUSLY EMOTIONALLY DISTURBED, ORTHOPEDICALLY IMPAIRED, OR OTHER HEALTH IMPAIRED, OR CHILDREN WITH SPECIFIED LEARNING DISABILITIES, WHO BY REASON THEREOF REQUIRE SPECIAL EDUCATION AND RELATED SERVICES. (SEC. 602)

FIGURE 1.1

SPECIAL EDUCATION IS DEFINED BY P.L. 94-142

THE TERM "SPECIAL EDUCATION" MEANS SPECIALLY DESIGNED INSTRUCTION, AT NO COST TO PARENTS OR GUARDIANS, TO MEET THE UNIQUE NEEDS OF A HANDICAPPED CHILD, INCLUDING CLASSROOM INSTRUCTION, INSTRUCTION IN PHYSICAL EDUCATION, HOME INSTRUCTION, AND INSTRUCTION IN HOSPITALS AND INSTITUTIONS.

FIGURE 1.2

Handicap and Disability

The terms "handicap" and "disability" are often used interchangeably. There are reasons why we want to make a distinction between these two terms although in some instances the two can be used interchangeably without a serious breach in communication.

A "disability" is a loss of function of some part of the body; e.g., partial or complete loss of sight, hearing, use of certain muscles, etc. Usually a disability refers to the loss of function resulting from a structural impairment at

the cellular tissue level. In recent years, the term "disability" has come to mean more than a loss of function of a part of the body. It may refer as well to psychological and neurological impairments.

The term "handicap" is more difficult to define, as it is the effect on a person produced by his/her disability. A person with a disability may be handicapped in one situation but not in another. For example, a person with a slight hearing loss might be at a handicap if he/she were to attempt to maintain a conversation with a friend out on a noisy street corner. On the other hand, the hearing loss, which is a disability, might not result in a handicap if the person were able to resume conversation in a quiet room. Whether a disability becomes a handicap or not depends on the individual's ability to adjust to it. For this reason, "learning handicap" might be a more appropriate term than "learning disability."

Interrelationships of Handicaps

The idea that only observable behaviors can be used as reliable indicators of children's problems is a concept that is stressed throughout this program.

Three major points are made in this module:

1. Identical behaviors may be found in children with different disabilities.
2. A disability may produce different behaviors in different children.
3. Handicapped children often have more than one handicap or problem.

The first two points listed above should serve as a caution. Avoid labeling children as having a certain disability simply because they exhibit a trait associated with the disability.

As an example, consider the problem of hyperactivity in children. Hyperactive children are often fidgety and out of their seats; they tend to be highly distractible and find it hard to concentrate for very long. They become preoccupied with irrelevant details instead of focusing on relevant stimuli.

It is a popular belief that brain injury is the cause of hyperactivity and that hyperactivity is a reliable and valid indicator of brain injury. However, there is a little solid scientific evidence to support this relationship. Many hyperactive children show no neurological evidence of brain injury; also, many brain-injured children are not hyperactive. There are indications that certain forms of brain injury may be related to hypoactivity, which is characterized by the opposite symptoms of hyperactivity. There is also evidence which indicates that brain injury may be the cause of certain forms of central nervous system disability, blindness, deafness, cerebral palsy, and epilepsy. However, other factors in addition to brain injury may cause the disabilities just listed. Consequently, it is often impossible to identify a specific cause and effect relationship between brain injury and hyperactivity of other disabilities.

Thus the first two points of the three major points listed above are virtually inextricably interwoven. It is extremely difficult to indicate with precision a cause and effect relationship between such factors as brain injury and hyperactivity. It is extremely difficult to indicate with precision a cause and effect relationship between a child's observable behavior and the disability that may be causing it.

MAJOR POINTS OF THE INTERRELATIONSHIPS OF HANDICAPS

- IDENTICAL BEHAVIORS MAY BE FOUND IN CHILDREN WITH DIFFERENT DISABILITIES.
- THE SAME DISABILITY MAY PRODUCE DIFFERENT BEHAVIORS IN CHILDREN.
- HANDICAPPED CHILDREN OFTEN HAVE MORE THAN ONE HANDICAP OR PROBLEM.

FIGURE 1.3

Similarly, identical behaviors may be found in children with different disabilities, i.e., children who are emotionally or mentally disabled may exhibit many of the same problems. However, the behaviors may be the results of very different mechanisms and causes. Taking only one set of behaviors, it would not be possible for anyone to make a firm and accurate diagnosis of the etiology, or cause, of the condition.

The third major point to be made in this module is that handicapped children often have more than one handicap or problem, and the problems are interrelated. This statement is especially true with more severely handicapped children. It seems to be the case that the more severe a given disability, the more likely it is that additional disabilities or problems will be present. Severe mental disability is almost always accompanied by some physical problem. Moderately handicapped children will feel a certain amount of frustration when they are unable to participate in certain competitive activities with their more normal peers. The frustration may lead to a characteristic style of behavior and eventually to additional emotional problems.

Physically handicapped children may be unable to compete in certain highly valued physical activities such as baseball during recess. Their peers may place a high value on this activity and spend free time "talking" baseball and playing baseball. The handicapped children may become frustrated because of their inability to play, and the frustration may become generalized and result in a loss of confidence in other abilities that the child possesses.

We have stated that identical behaviors may be the result of different disabilities. The third point is intimately related to the first two points stressed in this module. There often is a great deal of overlap among disabilities, and many different behaviors may be the result of a single disability. Again, caution must be exercised before assuming that a child has a certain disability just because he/she

exhibits one or more symptoms of that disability. Because there is an overlap of symptoms from different disabilities, psychologists and physicians frequently have a difficult time accurately diagnosing a child's problem.

In some cases, such a mental and emotional disability, the resulting behaviors may in fact be due to a third factor, such a brain injury. Brain injury may produce some forms of mental illness and some forms of mental disability. Most educational personnel do not have the training to make diagnoses about mental disability or distinctions between mental disability attributable to disease, brain injury, or cultural-familial conditions. It is more fruitful for educators to deal with the specific behaviors that they wish to change or improve rather than to conjecture about the etiology of the condition. This is why a school psychologist would use the term "learning disability" to describe a child who has average or above average intelligence but is performing below his/her capacity in a specific academic area. The cause may be brain damage, but as educators our concern is finding ways to remediate the problem or to help the child compensate for it. Knowing the etiology of a problem isn't always essential to its solution.

Labeling: Pros and Cons

Educators have discovered the hard way that some children who have been labeled as mentally handicapped in the academic atmosphere of the middle class school turn out to be self-supporting citizens once they leave the school situation. Sometimes these children have been described as "9:00 to 3:00 retardates." Even in school, special education youngsters may excel in an area such as art, music, shop, or athletics. The impact of the disability may be stronger in one situation than in another.

There has been a tendency in the past to categorize children on the basis of the disabilities which are most obvious in the school situation. This procedure has not always been successful. Public Law 94-142 now requires that every handicapped person receive an education at public expense which meets his/her individual needs. In order to accomplish this goal, the government established and has continued to use "categories" of exceptional children. The category system has limitations; the reason for labeling the child is to get special help for him/her, but we run the risk of unfairly penalizing or stigmatizing children by labeling them.

Labeling a child as Educable Mentally Retarded (EMR) tells us nothing specific about the child in terms of reading, arithmetic, or other academic skills. It tells us nothing about the relevant strengths and weaknesses of the child, nor of his/her particular interests and special abilities. Just like other children, handicapped children have unique personalities with likes, dislikes, special abilities, fears, ambitions, and idiosyncrasies. Like the rest of us, they need to be treated as individual persons, not as representatives of a group. Sometimes when a child has been categorized, adults deal with that child only in terms of the identified weakness, and his/her areas of strength atrophy as a result.

Instruction

In order to deal effectively with both normal and handicapped children, it is essential to work with the children as individuals, even though the group is labeled as EMR, LD or normal. It is important for regular classroom teachers to realize that good teaching techniques are basically the same, whether the student is handicapped or not. Working with the "special" student is a matter of making some modifications, not of teaching in an entirely different way. The goal is the same, whether the child is handicapped or not: to help the child make progress in using whatever abilities he/she has.

In these modules we will emphasize an individualized approach to the education of the child. However, there are compelling reasons why we will continue to use many traditional terms and concepts.

First, much of the information that is relevant to the study of children with problems is tied to the category system. Thus, by rejecting the category system, we may lose much relevant, valuable information.

Second, the category system is so well known that the dramatic departure from it would tend to inhibit communication among professionals. Since it is the purpose of this course to facilitate communication among teachers and other professionals, we feel obligated to use terminology and concepts that are well established and understood by most professionals.

Finally, a more appropriate model for dealing with handicapped children has not been developed to the extent that it is feasible to put into immediate use in the schools.

If this CAITE program is successful, you will be able to use the best ideas in perspective for handicapped students and deal with the educationally relevant differences among children. In the final analysis, classroom teachers must deal with the individual differences in behavior among and within children in order to successfully solve educational problems and enhance achievement. How the child is taught should be directly related to his/her needs as possible.

A Decision Process

The flowchart found in Figure 1.4 diagrams a decision-making process which can be used to prepare Individualized Educational Programs (IEP's).

Look at Box #2 of the flowchart. As the first step in the decision-making process, you must learn to evaluate each child with whom you work in order to identify the children who deviate from normal expectations in their patterns of behavior. This evaluation is an ongoing process--the progress of a child

must be monitored continually to assure each student the most relevant educational program for his/her current needs.

This process is discussed in detail in Module # 133 - "The Decision Process."

At this point it is important to recognize that boxes seven and eight may involve a teacher in unusual activities in that he/she can no longer depend as completely upon his/her own resources. In order to modify a child's educational program it may be necessary to involve others. Similarly, in order to make a referral (box 8) it may be necessary to obtain additional information. At the end of the booklet there is a selected set of national organizations and agencies concerned with different aspects of the exceptional child's problems. Increased familiarity with the agencies can be a big help in the development of an IEP and in the delivery of the educational program most needed by a child. In addition, it is useful to explore the community and the region around the school in terms of agencies and personnel who can be consulted when specialized knowledge is required to relate effectively to a handicapped child. Directories with referral information and with procedural guides have often been developed at the local, county and state levels. These should be sought and familiarity with them gained so that the spirit of P.L. 94-142 can be carried out.

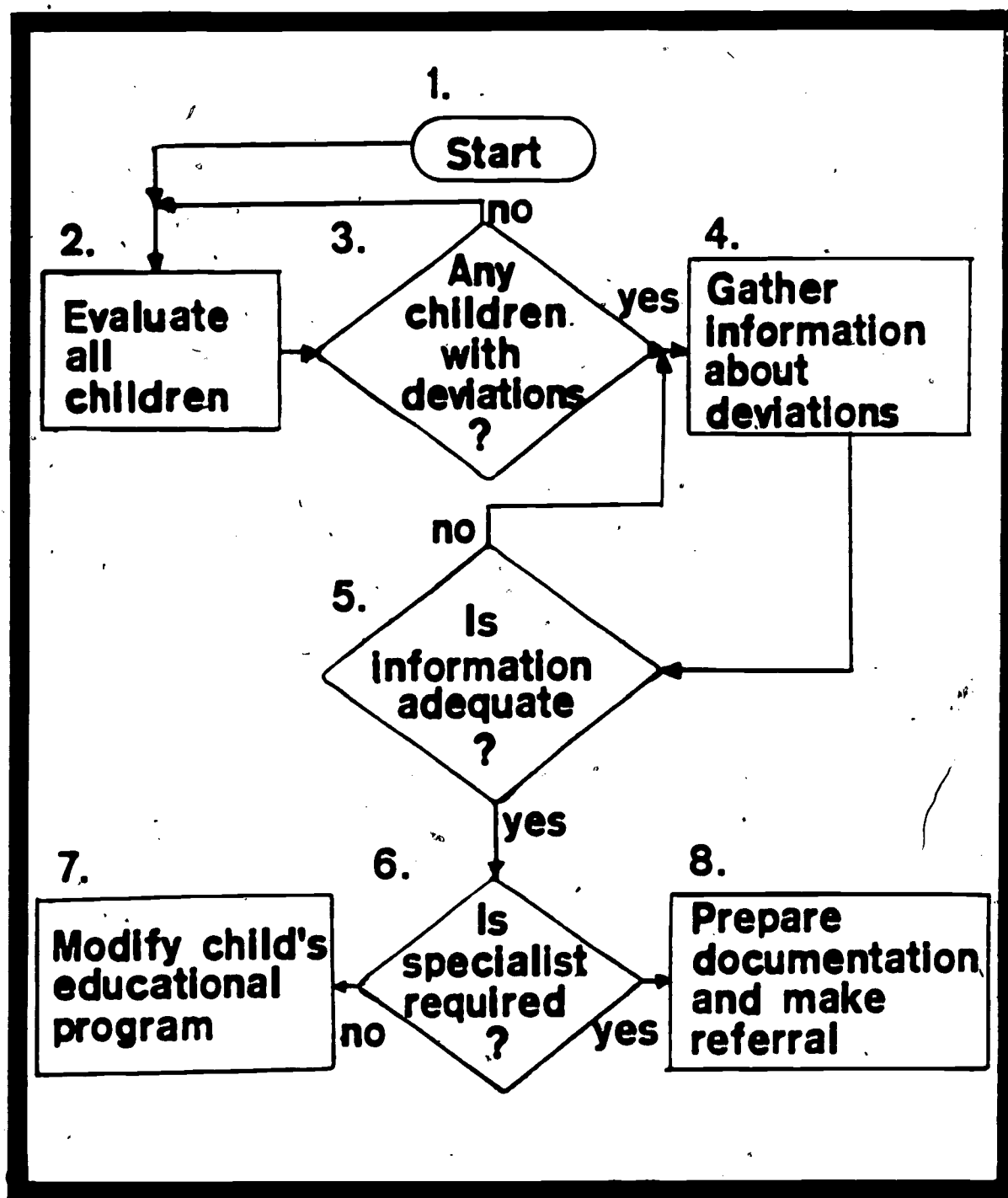


FIGURE 1.4

FLOWCHART:

THE DECISION - MAKING PROCESS

BIBLIOGRAPHY

INTRODUCTION TO CAITE

- Cartwright, G.P. and Cartwright, C.A. Care: Early Identification of Handicapped Children. University Park, Pa.: Pennsylvania State University, 1972.
- ERIC. A Guide to Agencies and Organizations Concerned with Exceptional Children. Exceptional Children, April 1969, 647-662.
- Hensley, G., Jones, C. and Cain, N. Questions and Answers: The Education of Exceptional Children. Denver: Education Commission of the States, 1975.
- Howe, C.E. A Cost Projection for Special Education Funding in Iowa 1975-1986. Iowa City: University of Iowa College of Education, 1978.
- Jones, A.D. Public Law 94-142: The Education for All Handicapped Children Act. Iowa City: A System of Personnel Development Project, 1980.
- Kirk, S.A. and Gallagher, J.J. Educating Exceptional Children. Boston: Houghton-Mifflin, 1979.
- Meyer, E.L. Exceptional Children and Youth: An Introduction. Denver: Love Publishing, 1978.
- National Advisory Committee on the Handicapped. The Unfinished Revolution: Education for the Handicapped, 1976, Annual Report. Washington, D.C.: Dept. of HEW, 1976.
- Pelosi, J. and Hocutt, A. The Education for All Handicapped Children Act: Issues and Implications. Chapel Hill: Graham Child Development Center, 1977.
- Schifni, J., Anderson, R., and Odle, S. Implementing Learning in the Least Restrictive Environment. University Park, Pa.: University Park Press, 1980.
- Smith, R.M. Teacher Diagnosis of Educational Difficulties. Columbus: Charles E. Merrill, 1978.

SELECTED NATIONAL ORGANIZATIONS AND AGENCIES
CONCERNED WITH EXCEPTIONAL CHILDREN AND YOUTH

ACLU Juvenile Rights Project
22 East 40th Street
New York, N.Y. 10016

Alexander Graham Bell
Association for the Deaf, Inc.
3417 Volta Place N.W.
Washington, DC 20007

American Academy for Cerebral
Palsy
University Hospital School
Iowa City, IA 52240

American Academy of Pediatrics
1801 Hinman Avenue
Evanston, IL 60204

American Association for the
Education of Severely and
Profoundly Handicapped
1600 West Armory Way
Garden View Suite
Seattle, WA 98119

American Association for Gifted
Children
15 Gramercy Park
New York, N.Y. 10003

American Association for Health,
Physical Education, and
Recreation
1201 16th Street NW
Washington, DC 20036

American Association on
Mental Deficiency
5201 Connecticut Avenue NW
Washington, DC 20015

American Association of
Psychiatric Clinics for
Children
250 W. 57th Street
Room 1032, Fish Building
New York, NY 10019

American Association for
Rehabilitation Therapy
P.O. Box 93
North Little Rock, AR 72116

American Corrective Therapy
Association, Inc.
811 Street Margaret's Road
Chillicothe, OH 45601

American Diabetes Association
18 E. 48th Street
New York, NY 10017

American Epilepsy Society
Department of Neurology
University of Minnesota
Box 341, Mayo Building
Minneapolis, MN 55455

American Foundation for the
Blind
15 W. 16th Street
New York, NY 10011

American Heart Association
44 E. 23rd Street
New York, NY 10016

American Lung Association
1790 Broadway
New York, NY 10019

American Medical Association
535 N. Dearborn Street
Chicago, IL 60610

American Occupational Therapy
Association
6000 Executive Blvd.
Rockville, MD 20852

American Orthopsychiatric
Association, Inc.
1790 Broadway.
New York, NY 10019

American Physical Therapy
Association
1156 15th Street NW
Washington, DC 20005

American Printing House for
the Blind
1839 Frankfort Avenue
Louisville, KY 40206

American Psychological
Association
1200 17th Street NW
Washington DC 20036

American Rehabilitation
Counseling Association of
the American Personnel and
Guidance Association
1607 New Hampshire Avenue NW
Washington, DC 20009

American Rheumatism Association
1212 Avenue of the Americas
New York, NY 10036

American Speech and Hearing
Association
9030 Old Georgetown Road
Washington, DC 20014

Arthritis Foundation
1212 Avenue of the Americas
New York, NY 10036

Association for Children with
Learning Disabilities
2200 Brownsville Road
Pittsburg, PA 16210

Association for the Aid of
Crippled Children
345 E. 46th Street
New York, NY 10017

Association for Education
of the Visually Handicapped
919 Walnut
Philadelphia, PA 19107

Association for the Help of
Retarded Children
200 Park Avenue South
New York, NY 10003

Association of Rehabilitation
Centers, Inc.
7979 Old Georgetown Road
Washington DC 20014

Association for the Visually
Handicapped
1839 Frankfort Avenue
Louisville, KY 40206

Bureau for Education of the
Handicapped
400 6th Street
Donohoe Building
Washington, DC 20202

Center on Human Policy
Division of Special Education
and Rehabilitation
Syracuse University
Syracuse, NY 13210

Center for Sickle Cell Anemia
College of Medicine,
Howard University
520 "W" Street NW
Washington, DC 20001

Child Welfare League of
America, Inc.
44 East 23rd Street
New York, NY 10010

Children's Defense Fund
1520 New Hampshire Avenue NW
Washington, DC 20036

Closer Look
National Information Center
for the Handicapped
1201 16th Street, NW
Washington, DC 20036

Council for Exceptional
Children
1920 Association Drive
Reston, VA 22091

Epilepsy Foundation of America
1828 "L" Street, NW
Washington, DC 20036

Foundation for Child Development
345 E. 46th Street
New York, NY 10017

Goodwill Industries of America, Inc.
9200 Wisconsin Avenue
Washington, DC 20014

Hemophilia Research, Inc.
30 Broad Street
New York, NY 10004

Institute for the Study of Mental
Retardation and Related Disabilities
130 South First
University of Michigan
Ann Arbor, MI 48108

International Association for the
Scientific Study of Mental
Deficiency
Ellen Horn, AAMD
5201 Connecticut Avenue, NW
Washington, DC 20015

International League of Societies
for the Mentally Handicapped
12 Rue Forestiere
Brussels -5, Belgium

International Society for
Rehabilitation of the Disabled
219 E. 44th Street
New York, NY 10017

Mental Health Law Project
1220 19th Street NW
Washington, DC 20036

Muscular Dystrophy Association
of America
810 7th Avenue
New York, NY 10019

National Aid to the
Visually Handicapped
3201 Balboa Street
San Francisco, CA 94121

National Amputee Foundation
12-45 150th Street
Whitestone, NY 11357

National Association of
the Deaf
2025 Eye Street, NW
Suite 321
Washington, DC 20006

National Association for
Gifted Children
8080 Spring Valley Drive
Cincinnati, OH 45236

National Association for
Mental Health, Inc.
Suite 1300
10 Columbus Circle
New York, NY 10019

National Association for
Music Therapy, Inc.
Box 610
Lawrence, KS 66044

National Association for
Retarded Citizens
2709 Avenue E. East
P.O. Box 6109
Arlington, TX 76011

National Association of
Sheltered Workshops and
Homebound Programs
1522 "K" Street NW
Washington, DC 20005

National Association of
Social Workers
2 Park Avenue
New York, NY 10016

National Association of
State Directors of Special
Education
1201 16th Street NW
Washington, DC 20036

National Association for the
Visually Handicapped
3201 Balboa Street
San Francisco, CA 94121

National Cancer Foundation
1 Park Avenue
New York, NY 10016

National Center for Law and
the Handicapped, Inc.
1235 N. Eddy Street
South Bend, IN 46617

National Committee for Multi-
Handicapped Children
239 14th Street
Niagara Falls, NY 14303

National Council for the Gifted
700 Prospect Avenue
West Orange, NJ 07052

National Cystic Fibrosis
Research Foundation
3379 Peachtree Road NE
Atlanta, GA 30326

National Easter Seal Society
for Crippled Children and
Adults
2023 West Ogden Avenue
Chicago, IL 60612

National Epilepsy League, Inc.
116 S. Michigan Avenue
Chicago, IL 60603

National Federation of the Blind
218 Randolph Hotel
Des Moines, IA 50309

National Foundation for
Infantile Paralysis
Box 2000
White Plains, NY 10602

National Foundation-March of
Dimes
800 2nd Avenue
New York, NY 10017

National Heart Institute
9600 Rockville Pike
Building 31, Room 5A50
Bethesda, MD 20014

National Hemophilia Foundation
25 W. 39th Street
New York, NY 10018

National Institute of Arthritis
and Metabolic Disease
Bethesda, MD 20014

National Institute of Health
United States Department of
Health, Education and Welfare
Washington, DC 20014

National Kidney Foundation
1125 27th Street
New York, NY 10016

National Multiple Sclerosis
Society
257 Park Avenue, South
New York, NY 10010

National Paraplegia Foundation
333 N. Michigan Avenue
Chicago, IL 60601

National Rehabilitation
Association
1522 "K" Street NW
Washington, DC 20005

National Therapeutic Recreation
Society
1700 Pennsylvania Avenue NW
Washington, DC 20006

National Society for Autistic
Children
621 Central Avenue
Albany, NY 12206

National Society for Prevention
of Blindness, Inc.
79 Madison Avenue
New York, NY 10016

Orton Society, Inc.
8415 Bellona Lane
Baltimore, MD 21204

President's Committee on
Employment of the Handicapped
U.S. Department of Labor
Washington, DC 20210

President's Committee on Mental
Retardation
Regional Office Building #3
7th and D. Streets SW
Room 2614
Washington, DC 20201

Society for the Rehabilitation
of the Facially Disfigured
550 1st Avenue
New York, NY 10016

United Cerebral Palsy
Association
66 E. 34th Street
New York, NY 10016

United Epilepsy Association
111 W. 57th Street
New York, NY 10019

Volta Speech Association for
the Deaf
1537 35th Street, NW
Washington, DC 20007